

## NASA HEALTH PROMOTION AND WELLNESS TEAM

**Minutes for:** July 18, 2001

**Attendance:** "X" means present

ARC	<input checked="" type="checkbox"/>	HQ	<input checked="" type="checkbox"/>	DFRC	<input type="checkbox"/>
JPL	<input checked="" type="checkbox"/>	PC	<input checked="" type="checkbox"/>	GSFC	<input checked="" type="checkbox"/>
JSC	<input checked="" type="checkbox"/>	KSC	<input checked="" type="checkbox"/>	MSFC	<input checked="" type="checkbox"/>
GRC	<input type="checkbox"/>	SSC	<input checked="" type="checkbox"/>	WFF	<input type="checkbox"/>
LRC	<input type="checkbox"/>	MAF	<input type="checkbox"/>	WSTF	<input checked="" type="checkbox"/>

### **Johnson Space Center Study on Exercise & Weight Control     Larry Wier, Ed.D.**

An overview of a 2-year study conducted at the Johnson Space Center (JSC) was reviewed. The article "Determining the amount of physical activity needed for long-term weight control" was published in the *International Journal of Obesity* (2001) 25, 613-621. The purpose of the study was to evaluate the influence of exercise on the body weight of men and women and develop a model defining the role of exercise on longitudinal weight change. A total of 496 (341 male and 155 female) NASA JSC employees participated in the study. The participants completed a 3-month educational component and remained involved in the exercise study for a minimum of 2 years.

The effect of exercise on weight loss is greatest for heavier individuals. Lighter individuals must exercise more to achieve the same effect. When weight loss occurs, the exercise habit must increase in order to continue the same rate of weight loss. The effect of exercise in women, or lack of exercise, is potentially twice that for men. Women tend to gain more weight with aging than men primarily because women are lighter to start with. Aging plays a minor role in longitudinal weight gain. Actual weight changes vary according to activity habit but aging brings an expected yearly gain of .8 pounds. The exercise level must be increased over the years to prevent the weight gain that occurs with aging. The impact of dietary intake was not measured in this study. However, dieting has a poor long-term impact on weight control and exercise appears to be the key for successful weight loss. The average amount of exercise needed to achieve long-term weight control is a weekly total of 8 miles jogging, 11 miles walking or 2 hours of comparable activity (i.e., basketball or tennis). This is the amount recommended for health maintenance by the Centers for Disease Control and Prevention (CDC) and the American College of Sports Medicine (ACSM).

In summary, the study demonstrated that habitual physical exercise (the only controllable variable in this model) is a significant source of long-term weight change. The use of self-reported activity level is helpful in predicting long-term weight changes and can be used by health care professionals when counseling patients on the value of exercise for weight control.

## Health Promotion Campaign Summary

## Center Reports

### *Nutrition Promotion*

- Johnson Space Center
  - The nutritionist at the Center was involved in this campaign that included a poster campaign, material handouts in the cafeteria and clinic, and presentation on nutrition in the auditorium. There was a 3-week nutrition question contest in the cafeteria with a couple of hundred employees participating.
- Jet Propulsion Laboratory
  - New food service vendor provided a cooking demonstration with 38 participants; the event was successful and will be repeated with an increase in the advertising next time. At the event vegetarian and low fat recipes were available as handouts. Some 2710 nutrition pamphlets were mailed out or provided as handouts in the clinic. There were posters posted throughout the Center.
- Stennis Space Center
  - The Occupational Health Fair was held in May with 529 participants. Information on diets and nutrition, exercise and emotional health were provided. Cholesterol and glucose screenings were available.
- Goddard Space Flight Center
  - A successful Health Fair was held in the spring providing information including nutrition, vitamins and juice works. A poster campaign was held and nutrition pamphlets were available in the Health Fitness Center and the clinic.

### *101 Critical Days of Summer*

- Ames Research Center
  - A variety of activities and topics were covered during the summer campaign. An outside speaker gave a session on Managing Stress and Change through Humor with 200 employees participating. The program was taped and Centers can borrow the tape by contacting Miriam Glazer. Security sent out a memo on traffic safety. The Family Safety Day was held for the third year with 300 parents and children attending. There was a magic show for the children with critical safety issues woven in and the Moffat police and fire department also participated. June was National Safety month and supervisors gave all their employees a briefing on general safety issues. In August a presentation on Breaking the Stress Cycle is planned.
- Johnson Space Center
  - The OH clinic partnered with the Safety & Health Committee to provide information on heat related injuries and heat stress. In April the Safety Fair was held and included information on solar safe, car seat safety, swimming safety and emergency response. A dermatologist from the Houston Society of Dermatology conducted 280 skin cancer screenings and identified suspicious lesions (an estimated 5 melanomas, 25 basal cell

carcinomas and 20 squamous cell carcinomas). The Health & Safety Committee also had a promotion on backs, ergonomics and return to school immunizations for children.

- Goddard Space Flight Center
  - A skin cancer screening was begun in June and will continue through September. The dermatologist is from George Washington University spending 4 hours at GSFC and 4 hours at HQ per week. There has been great participation and a significant amount of pathology identified (though no formal data available for ViTS). Safe summer activities included articles on Safety in the Sun, Fireworks Safety and a poster campaign associated with the health education group's calendar.
- Jet Propulsion Laboratory
  - In May a physician did full body skin examination with a total of 78 participants. In June a PSA screening and digital examination by physicians from the Cancer Detection Center was offered. In July there were handouts on poisoning including plants, household products, pets and red ants. There was also information on drowning and falls. The California State Highway Patrol will provide infant seat checks in August. In August a physician will give a lunchtime presentation on chronic illness including the physiological and psychology issues.
- Stennis Space Center
  - In May on *World No Tobacco Day* information on the harmful effects of tobacco products and use was given to 32 participants. In June the EAP coordinator and a guest speaker gave an all day seminar on Workplace Violence. In June on Safety Day information was available on snakebites, poison plants (including ivy, sumac and oak), boating safety, hurricane preparedness, seat belt education, gun safety, and drinking and driving awareness. Blood pressure, cholesterol, and glucose screenings were offered. Stress dots with biofeedback mechanism (changes in response to skin temperature and to emotional changes) were handed out. The 4-hour event was very well attended.
- White Sands Test Facility
  - Information on boating safety, firework safety, food safety and heat stress was sent out via e-mail and presentations given during safety meetings. Skin cancer screenings by an on-site physician who utilizes teledermatology as a backup are available. A local dermatologist does the back-up evaluations.

## **Health Promotion Campaign Schedule for Fiscal Year 2002**

*1<sup>st</sup> Quarter October 1, 2001 to December 31, 2001*

*Cold and Influenza Season*

Metric: Number of flu vaccines given.

Data requirements: Total # of flu vaccines administered.  
# of NASA civil servants  
# of contractors

# of others

2<sup>nd</sup> Quarter January 1, 2002 to March 31, 2002

*National Breast Cancer Awareness*

Metric: Total # and % of female civil servant population reached

Data requirements: Summary of activities

3<sup>rd</sup> Quarter April 1, 2002 to June 30<sup>th</sup>, 2002

*Promotion TBD*

Metric: TBD

Data requirements: TBD

4<sup>th</sup> Quarter July 1, 2002 to September 30, 2002

*Promotion TBD*

Metric: TBD

Data requirements: TBD

**Action Items:**

*101 Critical Days of Summer*

- Center Data Requirements due by September 30, 2001
  - Seat Belt Usage
  - Summary of Activities

**Next Committee ViTS:**

- October 17, 2001 4 PM to 5 PM EST